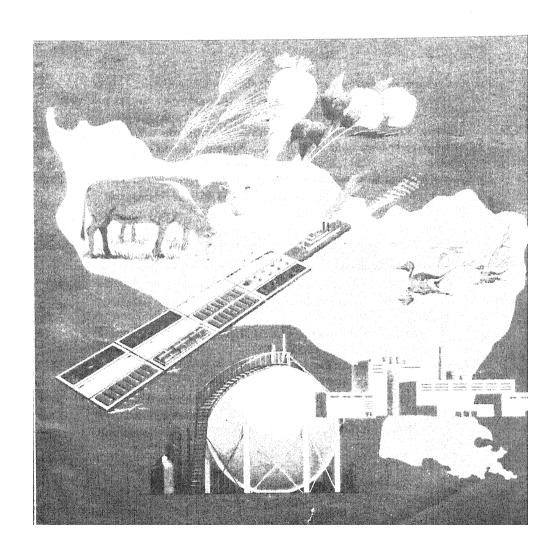
# CLEAN in the

WATER Arkansas, White, Red, and Lower Mississippi Valleys



## CLEAN WATER:

# In the Arkansas, White, Red, and Lower Mississippi Valleys

9

Perhaps you have heard or read about water pollution. It is caused mainly by city sewage and industrial waste we must get rid of, plus soil and other matter washed from our land.

Many streams, lakes, and even ground waters in the United States have become unfit for full use. Some dangerous conditions have arisen, and the public has become aroused. Congress has passed laws to help the States fight pollution.

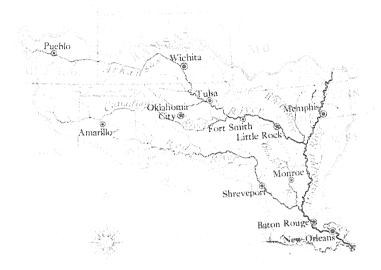
This pamphlet will tell you how we who live in this area, extending from Pueblo, Colo., to New Orleans, stand in regard to the pollution evil. It will also tell you how we can bring water pollution under control, and get clean water.

### A Dangerous Enemy

Water pollution is a dangerous enemy of modern civilization, a sort of disease that accompanies city growth and industrial expansion.

First effects are hardly noticeable, and damage to valuable water resources is small. Only certain places are affected. This is the first stage of the progressive disease.

The second stage may arrive almost before we realize it. The United States population is growing at an astonishing rate. The amount of sewage and other wastes is increasing even faster. A river or lake may quickly become so badly polluted that it is almost useless.



Then we must spend large sums of money to clean the water up. Or we must turn to some other still relatively unpolluted stream or body of water farther away.

### Damage From Pollution

Little Rock offers an example of this. It once drew its water supply from the Arkansas which flows right through the city. But cleaning the water became too costly. So Little Rock built a reservoir on a little stream miles away.

Tulsa is another example. The Verdigris River is in such bad shape that the city passed right over it and reached out many miles for a suitable supply. Fort Smith, Shreveport, Monroe, and other cities have also had to seek new, cleaner sources of water.

But what happens if these sources in time also get polluted? Do we go to still more distant ones?

And suppose all our public waters except those too small or remote for use get polluted, what then?

The number of cities over 25,000 in population in the United States has tripled in the last half century, and increased more than

20 percent in the last 10 years. Much of their population is served by sewers that empty into public water.

We all know how fast industry has been expanding. But few of us are aware of the ever greater volume of waste that must be disposed of, somehow, somewhere.

If all this sewage and industrial waste were dumped without restriction, many of the watercourses in this country would become vast cesspools.

Water is the lifeblood of our civilization. We have hundreds of uses for it, all essential to modern life. Our cities and industry need tremendous quantities of clean water to continue to exist, and prosper.

Polluted water is almost useless. Cities are compelled to raise money to stretch aqueducts out to man-built reservoirs for clean water. Factories, too, require good clean water; they must either meet additional costs for treating polluted water, or close up and move away. New industry is forced to locate elsewhere.

# Plants to Treat Waste

Here in the area drained by the Arkansas, White, Red, and Lower Mississippi Rivers, we are already beyond the first stage of water pollution—real damage is in evidence, on a number of our streams.

Luckily, there is something we can do. We can build plants to treat municipal and industrial wastes. These plants will bring pollution under control by eliminating or reducing the harmful effects of the wastes.

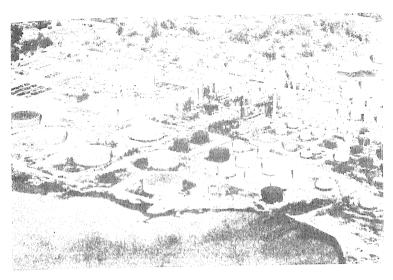
The situation has been under official study. Some much-needed pollution abatement work has already been done. We know where many municipal and industrial treatment plants are needed now. We can go right ahead with construction—that is, unless we wish

7 to live with pollution and suffer the consequences.

rewage treatment plant is a monument to a city's civic cressiveness, and an industrial waste treatment plant ny's public spirit.

er troublesome aspects

!



Floods and droughts—homes drifting downstream and crops seared in the sun—are spectacular. You don't need a microscope to see them. They arouse us to immediate action.

Water pollution may be less obvious; sometimes it can't be seen at all. But harmless-looking water may be deadly to fish, ducks, and other wildlife. It may poison shellfish. Worst of all, it can carry contagious disease like typhoid, enteritis, or dysentery.

We can usually purify water to make it safe for our use. But water may become so grossly polluted that treating it, day in and day out, month after month, year after year becomes costly and hazardous. Something or somebody might slip. Then we have an epidemic.

Does it make good sense to load public water with sewage and industrial waste—and afterwards try to purify it? Why not reduce the polluting effect of waste as much as possible, before dumping it into public water?

It will pay us to do so. Prevention is cheaper than cure. This is recognized public health practice. So also with water pollution.

### In Our Own Area

Although we have made considerable progress in pollution abatement, our record as a whole should be better. A State-Federal report published last year on water pollution in our area

listed more than 500 cities as needing some kind of waste treatment facility.

Some 132 municipalities, including 5 of our largest cities, discharge all their sewage without treatment. Other cities, 385 of them, originally progressive enough to build treatment plants, have let them become inadequate for present needs and should replace or enlarge their facilities.

Not so many facts are yet available about industrial pollution. But those facts which we do have are not encouraging. Only a handful of our known sources of industrial pollution report treatment of their waste.

Nearly 50 industrial plants are known to need waste treatment, with more to be added as additional data are received.

Brine and oil from oil fields present one of our most troublesome industrial waste problems. They are polluting a number of our finest streams. The Walnut in Kansas, Wichita in Texas, Verdigris in Oklahoma, and Ouachita in Arkansas and Louisiana are a few examples.

### The Cost

The total estimate of needed antipollution facilities in our area is the sum of many individual projects. Each treatment need is the responsibility of the citizens of the community or the officials of the industry concerned.

Treatment facilities recommended for the cities in our region were estimated to cost about \$50 million. But when this is divided up among all of us who will benefit from the construction, the cost is very small. Building and operating a municipal plant, for example, when financed over a period of years, will cost each family in the community no more than a few cents a day.

Surely this is little enough to pay in return for abating an evil that endangers health, spoils water for industrial and agricultural use, kills fish and wildlife, ruins recreational areas, and is undermining the very foundation of our highly urbanized and industrialized American way of life.

A Cooperative State-Federal Publication of the

Federal, Security Agency, Public Health Service

With the

ARKANSAS WATER POLLUTION CONTROL COMMISSION
COLORADO DEPARTMENT OF PUBLIC HEALTH
KANSAS STATE BOARD OF HEALTH
KENTUCKY WATER POLLUTION CONTROL COMMISSION
LOUISIANA STREAM CONTROL COMMISSION
MISSISSIPPI STATE BOARD OF HEALTH
THE DIVISION OF HEALTH OF MISSOURI
NEW MEXICO DEPARTMENT OF PUBLIC HEALTH
OKLAHOMA STATE DEPARTMENT OF HEALTH
TENNESSEE STREAM POLLUTION CONTROL BOARD
TEXAS STATE DEPARTMENT OF HEALTH

Public Health Service Publication No. 252

U. S. GOVERNMENT PRINTING OFFICE: 1952 O-230267